

# INTRODUCTION TO INVESTING

## “Take Charge of Your Finances” Advanced Level

### What is Investing?

Savings tools are perfect for developing financial security. However, once a person has accumulated an appropriate amount of liquid assets in savings, they may want to refocus their goals from saving to investing. **Investing** is the purchase of assets with the goal of increasing future income. Investing adds to financial security by increasing wealth and helping an individual reach their desired standard of living. Investments are appropriate for long-term financial goals such as buying a new home, retiring in thirty years, or paying for a child’s college education in eighteen years.

What long-term goal could investing help you obtain?

Investing focuses on wealth accumulation, because the tools used for investing have the potential to earn higher rates of return than savings tools. The **rate of return** is the total return on an investment expressed as a percentage of the amount of money invested.



**Example:** Mandy saved \$2,200 in a money market deposit account. After one year, she has a return of \$110. What is Mandy’s rate of return?

**Complete your own:** Derek invested \$900. When he withdrew his money from the investment, he had a total of \$1,050. What is Derek’s rate of return?

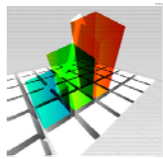


### Investment Risk

It is important to understand that as the potential return on an investment rises, generally, so does the risk involved with the investment. **Risk** is the uncertainty regarding the outcome of a situation or event. When people invest their money, they are dealing specifically with **investment risk**, which is the possibility that an investment will fail to pay the expected return or fail to pay a return at all. In fact, some investments are so risky that an investor could lose the potential return as well as the initial investment. Risk is a trade-off to investing and the potential for high returns; all investments carry some level of risk.

When focusing on wealth accumulation, a person should strive to have the rate of return earned on an investment be higher than the rate of inflation. **Inflation** is the rise in the general level of prices. If an individual has money invested at a 2% interest rate, and the inflation rate is 2%, the individual’s wealth will not increase. In fact, after taxes they will actually be losing money. This is known as **inflation risk**, or the danger that money won’t be worth as much in the future as it is today. However, inflation risk is usually not a concern with savings since the goal of savings is to provide current financial security.

In terms of risk, how are our investment tools different from savings tools?



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## Types of Investment Tools

### STOCKS

When an individual buys a stock, they are buying ownership in a company. Therefore, **stock** is a share of ownership in a company, and the owner of the stock is called the **stockholder** or **shareholder**. The amount of stock purchased determines how much of the company a stockholder owns. However, usually a stockholder owns only a very small part of the company. If the company makes a profit, then the stockholder may receive part of that profit as their return. This is called a **dividend**, which is the share of profits distributed in cash. Dividends are not the only type of return an investor can receive from owning stock. Stockholders expect that the market price of the stock will increase. The **market price** is the current price that a buyer is willing to pay for stock. Therefore, if a stockholder is able to sell their stocks for a market price higher than what they paid, they will receive a return. However, if the company performs poorly or goes out of business, the stockholder could lose part or all of their initial investment, depending on the market price at which they were able to sell their stocks.

### BONDS

A **bond** is a form of lending to a company or the government (city, state, or federal). When an individual purchases a bond, they are lending money to an organization in return for a set interest rate. The company or the government entity pays annual interest to the investor until the maturity date is reached. The **maturity date** is the specified time in the future when the principal (or initial investment) amount of the bond is repaid to the bondholder. Bonds are less risky than stocks but also do not have the potential to earn as much money as a stock.

### MUTUAL FUNDS

A **mutual fund** is created when a company combines the funds of many different investors and then invests that money in a diversified portfolio of stocks and bonds. The investors then receive a portion of the total return from the portfolio. Mutual funds reduce investment risk by helping people spread risk among a variety of stocks and bonds. If one investment within the mutual fund fails to pay a return, chances are high that another investment within the fund will still pay a return. Mutual funds save investors time, because they no longer have to choose individual stocks and bonds themselves. Instead, a group of mutual fund managers constantly evaluate which stocks and bonds to buy and sell. Fund managers work for the investors managing the portfolio and, therefore, charge fees which can be very high. The amount of fees charged depends on the type of mutual fund and the company that offers it.

### INDEX FUNDS

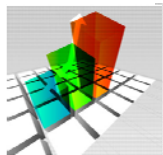
An **index fund** is a mutual fund that was designed to reduce fees by investing in the stocks and bonds that make up an index. An **index** is a group of similar stocks and bonds. For example, the Standard and Poor 500 is an index that includes the 500 largest companies that sell stock. By buying and holding a specific set of stocks and bonds, index funds require very little management compared to mutual funds and can charge lower fees.

### REAL ESTATE

Real estate can include any residential or commercial property or land as well as the rights accompanying that land. Real estate investments include forms of property and land ownership such as rental units or commercial property. Usually a family home is not considered an investment asset but this depends on many different factors. Real estate investing can be risky and more time consuming than other forms of investing, but the opportunity for large returns is high.

### SPECULATIVE INVESTMENTS

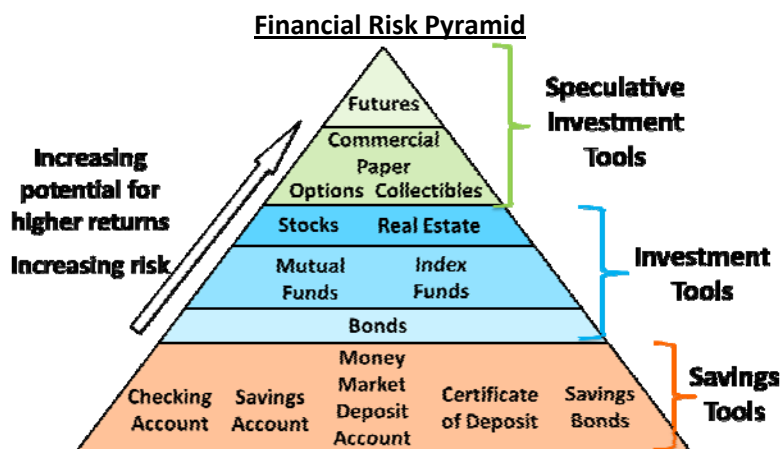
Futures, options, commercial paper, and collectibles are other forms of investments. These investments have very high levels of risk and are referred to as speculative investments. **Speculative investments** have the potential for significant fluctuations in return over a short period of time. These investments are recommended for people with an aggressive investment philosophy and a high level of financial security.



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The **financial risk pyramid** illustrates the trade-offs between risk and return for a number of saving and investing tools. Savings tools are on the first level of the financial risk pyramid, because they are free of the risk of losing the amount of principal invested. However, the trade-off is receiving lower return on the money in those accounts. The pyramid is not exact and the risk level for specific investments may vary.



The potential for financial gain is what motivates people to accept higher amounts of risk. Each individual has his or her own tolerance level for the amount of risk they are willing to take on. This is known as an **investment philosophy**, or an individual's general approach to investment risk. Investment philosophies are generally divided into three main categories: conservative, moderate, and aggressive. Individuals with an aggressive investment philosophy will be willing to take on more risk for the potential of higher returns and therefore, will usually want to invest in a larger amount of tools higher up the financial risk pyramid.

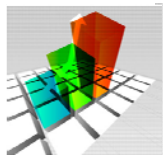
Portfolio diversification is a method to assist with investment risk reduction. **Portfolio diversification** reduces risk by spreading investment money among a wide array of investment tools. Every investment tool has its ups and downs, and chances are if one investment is losing money, another investment will be earning a return. The goal of portfolio diversification is to create a collection of investments that will provide an acceptable return with an acceptable exposure to risk. Most people practice diversifying their portfolio according to their investment philosophy. For example, a person with an aggressive investment philosophy will most likely include a larger amount of high risk tools in their portfolio.

## Buying and Selling Investments

In order to buy and sell investments, an individual needs to utilize a brokerage firm (except for real estate and certain speculative investments). There are two different types of brokerage firms: a full service general brokerage firm and a discount broker. Both a full-service and discount broker act as a buying and selling agent for the investor. A full-service general brokerage firm offers the completion of an investment transaction as well as investment advice and one-on-one attention from an employee of the firm, known as a broker. Brokers earn a commission on each investment transaction. The amount of the commission varies between brokerage firms. A discount broker provides limited services to investors. A discount broker only completes orders to buy and sell investments; they do not provide any advice as to which investments to buy and sell. Because of this, discount brokers can charge commissions that are 40 to 60 percent less than general brokerage firms.

## Taxation

Investors need to understand how income taxes apply to investments. Since the profits earned on investments are considered to be unearned income, income taxes are often owed on these profits. Taxes are due on most investment returns in the year in which the unearned income is received. However, the government tries to encourage certain types of investments by making them tax-sheltered. **Tax-sheltered investments** eliminate, reduce, defer, or adjust the current year tax liability. Tax-sheltered investments can grow faster, because the money that would have gone to the government in taxes can remain in the investment to compound and increase in value.



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The most common tax-sheltered investments are offered for those who wish to invest in retirement, but there are also tax-sheltered investments available for child/dependent care, education expenses, and health care expenses. Tax-sheltered investments are usually not tax free. Depending upon the type of account, taxes are most likely paid when the money is put into the account or when the money is taken out of the account. There are also limits to the amount of money per year that can be invested in a tax-sheltered investment. It is recommended that an individual invest as much money as possible in tax-sheltered investments to maximize the benefits.

Some tax-sheltered investments are sponsored by employers as an added benefit and incentive for employees to invest. Employer-sponsored investment accounts allow employees to reduce their tax liability and make investing automatic. Money invested in employer-sponsored retirement accounts is automatically taken out of an employee's paycheck. Another benefit of employer-sponsored accounts is that employers will sometimes contribute a portion of money to the investment (also known as matching funds) with no additional cost from the employee. It is recommended that a person utilize employer-sponsored retirement accounts as much as possible if they are offered.

## Rule of 72

The "**Rule of 72**" allows a person to easily calculate when the future value of an investment will double the principal amount. When 72 is divided by the interest rate, the answer is the number of years it will take the investment to double.

$$\text{72} \div \text{Interest Rate} = \text{Number of years needed to double the principal investment}$$

### Rule of 72 FYI:

The rule is only an approximation

The interest rate must remain constant throughout the time of the investment

The interest rate is not converted to a decimal when completing the calculation

The equation does not allow for additional payments to be made to the original amount

Interest earned is reinvested, creating a compounding interest

Tax deductions are not included within the equation

**Complete your own:** Jacob currently has \$5,000 to invest in a car after graduation in 4 years. What interest rate is required for him to double his investment?

$$\text{ } \div \text{ } = \text{ }$$

### The "Rule of 72" can determine:

How many years it will take an investment to double at a given interest rate using compounding interest

How long it will take debt to double if no payments are made

The interest rate an investment must earn to double within a specific time period

How many times money (or debt) will double in a specific time period

**Example:** Doug invested \$2,500 into a Certificate of Deposit earning a 6.5% interest rate. How long will it take Doug's investment to double?

$$\text{72} \div \text{6.5} = \text{11 years}$$

**Complete your own:** Jessica has a \$2,200 balance on her credit card with an 18% interest rate. If Jessica chooses to not make any payments and does not receive late charges, how long will it take for her balance to double?

$$\text{ } \div \text{ } = \text{ }$$